

ABSTRACT

A microcontroller is realized that is capable of eliminating the time lag required for changing the frequency during operation and of reducing power consumption by accurately and rapidly performing the frequency control in accordance with the task. Since frequency control can be performed in the pipeline processing of the execution instruction by adding a frequency control signal for determining the division ratio of the system clock to the operation code and fetching and decoding the frequency control signal together with the operation code by the pipeline processing, the time lag required for changing the frequency can be eliminated.